DOCUMENT RESUME

ED 285 052 CG 020 094

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TITLE Work Related Stress: Application of a Special Study to the General Business Community.
PUB DATE Apr 87
NOTE 16p.; Paper presented at the Annual Meeting of the American Educational Research Association (Washington, DC, April 20-24, 1987).
PUB TYPE Reports - Research/Technical (143) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Coping; *Employee Attitudes; Employer Employee Relationship; Interpersonal Communication; Marital Status; *Stress Management; *Stress Variables; *Work Attitudes; *Work Environment
IDENTIFIERS *Airplane Flight Attendants

ABSTRACT

There has been much recent attention given to stress and the negative side effects associated with excessive stress. Employers need to recognize the effect that stress can have on the productivity and attitudes of their employees. To examine work-related stress and to develop stress management strategies, a study was conducted of flight attendants (N=380). Subjects, classified as commuters or non-commuters, completed questionnaires which assessed stress producing job-related events, explored ways of relieving stress, and provided demographic information. The results indicated significant differences between commuters and non-commuters in their experience of stress. Commuters reported experiencing more job stress and more personal stress than did non-commuters. The findings also revealed significant differences based on marital status, with non-married flight attendants reporting more plane related stress and more interpersonal stress than did married attendants. Other differences found related to seniority and healthy opposed to unhealthy coping techniques. These findings can be used as a basis for developing stress management workshops and counseling strategies which can be effective in reducing absenteeism, increasing productivity, improving morale, and reducing substance abuse. Employers should aim to provide employees with the appropriate forum for communicating their concerns. (NB)

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WORK RELATED STRESS: APPLICATION OF A SPECIAL STUDY TO THE GENERAL BUSINESS COMMUNITY

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Paper presented at the Annual Meeting of the American Educational Research Association, Washingtin, DC, April 20-24, 1987.

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Work Related Stress: Application of a Special study to the General Business Community

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INTRODUCTION

The objectives of this presentation are to share with personnel in the business community the findings of a study in which data were collected from a large group of professionals relative to work related stress and ways of coping with that stress. In addition, strategies will be presented which deal with coping with the stress of work.

There has been much recent attention to stress and the negative side effects often associated with excessive or unrecognized stress. It is known that such stress can lead to disabling health conditions or even death. Frequently, the key stress factors are work related. Many aspects of the job, or at least the employees perception of the job, can be major causes of stress.

Although stress-related disabling conditions are a concern to employers, more subtle forms of stress may be less recognizable but more damaging to productivity. On-going, low level stress may affect employee absenteeism and tardiness as well as reduce the quantity and quality of work produced.

Also, there has been concern about work-related travel and the stress which is frequently attached to it. Many people commute long distances on a regular basis as part of their jobs. It has been found that most commuters perceive commuting as an extension of work time more than leisure time. As a result, they usually attempt to engage in work-related behavior during the commute. For those whose work entails frequent trips away from home, they have to contend not only with such stressors of travel as fatigue, jet-lag, and strange surroundings, but also with separation from family and non-work activities. The expected increase in two-career families will likely lead to more employees commuting long-distance.

Employers need to recognize the effect stress can have on the productivity and attitudes of their employees and seek solutions to this problem. Personnel in a

variety of job settings, such as Employee Assistance Programs, Human Resource Development, and Training and Development can add strategies to their programs which deal specifically with stress management.

Information collected from a study of professionals relative to stressful work conditions serves as a special case for the study of work-related stress and for the development of strategies for dealing with that stress.

Let me tell you a little about our findings before I focus on the coping strategies.

THE STUDY

For this study, a questionnaire was developed and randomly distributed to 1000 United Airlines Chicago-based flight attendants (F.A.'s). Three hundred eighty questionnaires were completed and returned. Data were collected relative to stress producing job-related events, was of relieving the stress and demographic information.

The data permitted the classification of the F.A.'s into groups classified as "commuters" or "non-commuters". Commuters were identified as persons who live more than 100 miles from their work places. While long distance commuting is not limited to flight attendants, peculiarities of their job seem to encourage long distance commuting. For example, approximately 42% of the Chicago-based United Airlines F.A.'s commute to work from distances outside a 100 mile radius of O'Hare International Airport. Analysis of the data from commuters has yielded information which has implications for all employees who must commute long distances because of their work.

The multivariate analysis of variance for the stress categories found significant differences between commuters and non-commuters, among marital status and among seniority. Significant univariate differences were found between the commuters and non-commuters in the areas of "Job Stress" and "Personal Stress" with the commuters reporting higher levels of stress in both areas.

INTERPRETATION OF FINDINGS

The results indicate significant differences between commuters and non-commuters experience of stress. Commuters experience more Job Stress (getting to work on time, fear of missing a trip) and more Personal Stress (being away from home, separating

from loved ones) than do non-commuters.[1]

The data implies that for commuters coming in from out of town, just getting to work on time is more stressful than for non-commuters. They have weather conditions to contend with at both ends of their commute, potential mechanical delays, or even the fear of not getting on the airplane bound for their home base. All of these possible stressors occur even before their actual work day begins. Furthermore, as previous research has indicated, fear of missing a trip or causing some trauma to the crew is a pervasive fear of all flight attendants, but in this case, particularly for commuters.

The data further suggests that Personal Areas placed more stress on commuters than non-commuters. This is understandable, because commuters are away from home more often than non-commuters. As a result, there are periods of loneliness or times when personal problems go unresolved. They also have additional financial pressures to contend with, such as airline passes, hotel and restaurant bills, and, for some, automobiles and furnishing for two separate residences. Consequently, to reduce expenses some share living quarters with others. This usually helps financially, but creates the added burden of little or no privacy.

The results indicate a significant difference between married and non-married flight attendants experience of work-related stress. The non-married flight attendants experience more stress of The Plane (being understaffed, disguising irritation inflight), as well as more Interpersonal Stress (personality conflicts with a flying partner, demanding or unreasonable passengers) than do married flight attendants. Further, they demonstrate significant differences in their manner of utilizing Coping Techniques. Fortunately, non-married flight attendants exhibit more Very Healthy Techniques (taking a hot bath or shower, getting enough physical exercise), and more Healthy Techniques (listening to music, reading) than married flight attendants. However, they also exhibit more Unhealthy ways of Coping (having an alcoholic drink, smoking cigarettes) than their married counterparts.

The research suggests that non-married flight attendants find their work on the Plane, as well as in their Interpersonal Relations at work stressful.

[1]Relevant tables of results are in appendix A.

As previous research indicated, female flight attendants tend to be the focus of complaints, displaced anger, and general passenger frustration. Non-married flight attendants may be personalizing these negative interactions, which can be stress producing. Learning to depersonalize instances like these, and learning to assert themselves on a professional basis, can help to alleviate or eliminate Interpersonal Stress.

Often, loneliness along with stress can compound the situation. For instance, going home to an empty house after spending days travelling in and out of strange cities can be a lonely existence. Married flight attendants have the advantage of having a significant person waiting for them after a long trip. Their spouse is able to act as a buffer and absorb some of the stress they may be experiencing upon their return. However, many non-married flight attendants are lacking that resource so therefore must learn to cope on their own.

One thing proven by the research is that out of the 380 surveys returned, 338 respondents indicate that they--ALMOST ALWAYS--removed their uniform as soon as possible upon returning home. Previous research suggested that flight attendants need to make that physical re-entry into the real world, so almost all of them allow time for that process.

The results indicate a perfect linear pattern of significant differences in relation to seniority and the stress experienced On The Plane (weather or mechanical delays, the passenger boarding process). The stress level increased significantly after each five year increment. Therefore, it would appear that as flight attendant seniority increases, tolerance for stressful events that occur On The Plane decreases. This may be attributed to senior flight attendants becoming less tolerant over the years of unpredictable situations in which they have little or no control. Conversely, junior flight attendants may have experienced the problems less often and still view them as a challenge.

Another significant difference associated with seniority concerns Job Stress (working special holidays, fear of going on sick list).

Flight attendants with the most seniority (16+ years) experience the least amount of Job Stress, followed secondly by flight attendants with the least amount of seniority (1-5 years). Those two groups experience the least amount of Job Stress. It may be that flight attendants in the senior group are very secure in their job, and the flight attendants with very little seniority are still excited about the newness of the job. However, the results suggest that those flight attendants in the middle range (6-15 years) are experiencing the greatest amount of Job Stress. This may be due to recent commitments such as returning to school, purchasing a home, or starting a family.

Differences are found in relation to seniority and Healthy Coping Techniques (reading, listening to music). Flight attendants with (1-5 years) seniority exhibit the highest scores in relation to following Healthy Ways of Coping with work related stress. The other three groups have very similar scores, but they were lower than the most junior group. This would imply that the most junior flight attendants take more time in their personal life to follow some positive approaches to relieving stress.

There was no significant difference regarding the various groups and their overall stress scores. This may be attributed to each specific group being very unique in their differences pertaining to stressful events and ways of coping.

In the final open-ended question that pertained to problems or symptoms associated with work-related stress, the two groups compared consisted of non-commuters and commuters. Both groups expressed concern over health issues such as: muscle tension in their neck and shoulders, total fatigue and exhaustion after certain trips, headaches caused from stress, cigarette smoke, or working in poor quality air, gastrointestinal problems that ranged from colitis for non-commuters, to ulcers for commuters. Areas they differed in were also evident. For the non-commuters, their specific symptoms included the physical and emotional effects of cigarette smoke in the cabin, as well as their experience with sleep disorders and insomnia. Commuters seemed to express more concern over their feelings of depression and moodiness, which may be attributed to the frustration of commuting.

IMPLICATIONS OF THE STUDY

Currently, many careers entail a frequent amount of business travel. Unfortunately, with increased travel comes being away from home for entended periods of time which, for some individuals, can bring on loneliness, boredom, and frustration. Furthermore, it can create tension or distance with loved ones if not properly addressed. This in turn can create disharmony at work; so essential precautions, need to take place.

This can be commplished in ways that are inexpensive and not extremely time consuming to employers. First of all, employers need to assess the work environment and their expectations of employees to fully understand the job-related stress their workers may be experiencing. Then workers should be allowed to voice their particular concerns in workshops conducted by their employee assistance group, the human resource group, or by the training and development department. If those programs are not available on the business site, hire a professional to come in quarterly or semi-annually to meet with these employee groups.

Topics to be addressed in these workshops should include peculiarities of particular jobs and stressors associated with them. Learning how to cope with these unique stressors "on-the-road", as well as, in the office or at home would also be beneficial. Furthermore, it would be advantageous to address communication skills so employees can learn how to be more confrontive about difficult issues in a healthy, but direct manner.

Second, frequently publish articles on health related topics in the monthly corporate newsletter. This not only teaches workers more about their own basic health, but it tells them that you the employer cares about their well-being. Brochures should also be available to follow-up on article topics such as coping with stress, burnout, heart disease, high blood pressure, nutrition, alcohol and substance abuse, eating disorders, combatting jet-lag, and loneliness.

It would be of further value to have brochures available on "points of interest" in the different cities employees make frequently on their business trips. This would encourage them to get out of their hotel room where loneliness seems to be the most prevelant.

If an employee assistance program is not set up "in-house", affiliate yourself with one "out-house". Your local hospital or the closest Association of Labor and Management Consultants on Alcoholism (ALMACA) chapter can help you accomplish this. That way employees can be honest about any problems or concerns whether personal, or job-related, knowing that their job will not be jeopardized and that their confidentiality will be protected. Quality circles may be another avenue to persue in getting workers to discuss pertinent issues.

Finally, other ideas include bulletin board suggestions that would remind employees to take time out, slow down, relax, or to contact the local EAP if necessary. Notifying workers of lunchtime exercise programs available in the area as well as providing a smoke-free work enviornment would be appreciated. Encourage employees to frequent restaurants that offer low-fat and low-chloresterol meals. During long business meetings, take time out to stretch and practice relaxation techniques. A physically and mentally healthy employee is a more productive one.

The following counseling strategies have been found to be effective in helping workers deal with work-related stress. Workshop leaders should help clients cope with their stress by using four general techniques: mental, behavioral, physical, and emotional techniques. These are general techniques, but would be of particular value to those who commute or travel a great deal with their work.

MENTAL TECHNIQUES

A client must become knowledgeable about stress. In order to reduce stress, the client must first understand it. They must eliminate irrational expectations and beliefs to avoid feeling over-whelmed. In doing so, they should also pinpoint what is exhausting and frustrating about commuting or business travel. You should help the client develop different ways of handling these responsibilities once they have been established.

BEHAVIORAL TECHNIQUES

A client must learn to develop a repertoire of time-management techniques so they can plan their home and work life in a way that uses time and energy more efficiently. They should develop skills for dealing directly with a stressful situation in a way that is the least exciting. Any action that makes them feel more in control of the situation is a step toward freedom from stress. Clients should learn to be assertive in order to manage conflicts in an open and direct fashion. Finally, during long delays or lengthy periods between trips clients should have reading material or paperwork available, so they feel that their time is being spent productively.

PHYSICAL TECHNIQUES

Clients should learn to take time everyday to be quietly be themselves. A person can train his/herself to relax by deliberately tensing and relaxing their muscles, by practicing deep breathing techniques, by thinking about and visualizing pleasant scenes, and through meditation. They should devleop the kind of lifestyle that will prevent and buffer the effects of stress. This can be accomplished by regularly and routinely practicing some form of each of the three types of exercise: vigorous, stretching, and recreational; by reducing the use of alcohol and tabacco; by obtaining sufficient rest on a regular basis; and by eating a balance diet. Additionally, research as found that the body needs one day to adjust for each time zone crossed. Therefore, clients need to be aware of how jet-lag affects them. Jet-lag has been defined in terms of feelings of irritability, insomnia, indigestion, and general disorientation. This tends to occur when the body clocks are out of synchronization with time clues in the environment.

EMOTIONAL TECHNIQUES

Clients must learn to handle and change unwanted emotions such as: frustration, depressions, feelings of failure, and boredom in order to reduce stress. Moreover, they should learn to see and use humor. Humor makes an event more enjoyable, it is relaxing, and it can take the edge off tense, emotionally draining or pressuring situations.

Further, they should establish and maintain a strong support network. Clients must learn to talk about their problems with someone they trust; before tensions build up. Finally, the greater the amount of any single stressor, the less energy one will have available to handle other stress situations. Therefore, clients whould anticipate stressful times and ensure themselves an adequate reserve of energy to help get through a stressful period.

CONCLUSION

The data clearly suggests that many professionals experience work-related stress. Work-related travel can be an additional stressor. Data from this study can be extrapolated to other work situations. The research related to work stress has served as a basis for developing stress management workshops and counseling strategies, which can be profitable in reducing absenteeism, increasing productivity, improving morale and reducing substance abuse. Finally, workers want to talk about what is important to them. The aim of employers should be, to understand what workers are trying to tell them, by providing the appropriate forum for this vital communication.

APPENDIX A

Questionnaire data dealing with work related stressful events and techniques for coping with that stress were collected from flight attendants. The categories of work stress included: events that occurred on the airplane; events that were job-related but occurred off the airplane; interpersonal relations; physiological aspects of their job; and personal areas of concern. Coping techniques were divided into categories of: very healthy; healthy; and unhealthy ways of relieving work related stress. The data was analyzed by: residence (non-commuter and commuter); marital status (non-married and married); and seniority range (1-5 years, 6-10 years, 11-15 years, and 16+ years). The data was analyzed using multivariate and univariate analysis of variance procedures.

As noted in Table 1, the multivariate analysis of variance for the stress catagories found significant differences in residence, marital status, and seniority. However, there were no significant interactions.

Table 1

Multivariate Analysis for the Five Stress Categories

Variable:	df hypotheses	df error	F	Level of Significance
Seniority	15	776	2.41	.01
Residence	5	281	5.00	.01
Marital Status	5	281	2.45	.05
Seniority x Residence	15	776	1.04	n.s
Seniority x Marital Status	15	776	1.23	n.s
Residence x Marital Status	5	281	1	n.s
Seniority x Residence x Marital Status	15	776	1	n.s

Table 2 shows that the multivariate analysis of variance for the coping techniques found significant differences only for marital status. There were no significant differences for seniority or residence and no significant interactions.

Table 2

Multivariate Analysis for the Three Coping Techniques

Variable:	df hypotheses	df error	F	Level of Significance
Seniority	9	725	1.59	n.s
Residence	3	298	1.92	n.s
Marital Status	3	298	4.47	.01
Seniority x Residence	9	725	1	n.s
Seniority x Marital Status	9	725	1	n.s
Residence x Marital Status	3	298	1	n.s
Seniority x Residence x Marital Status	9	725	1	n.s

As noted in Table 3, significant univariate differences were found. For the measure of Plane Stress, significant differences were found between the two marital groups (non-married and married) and among the four seniority groups (1-5 years, 6-10 years, 11-15 years, and 16+ years). For the measure of Job Stress, significant differences were found between the residence groups (non-commuters and commuters), and among the seniority groups. For the measure of Interpersonal Stress, significant differences were found only between the marital groups. For the measure of Personal Stress, significant differences were found between the residence groups. No significant differences were found for the measure of Physiological Stress.

Table 3

Mean Squares for the Measures of Stressful Events for Female Flight Attendants

Measure of Stress:	Residence (df=1)	Marital Status (df=1)	Seniority (df=3)	Error df	Error M.S.
Plane Stress	9.06	65.33*	53.18*	285	14.78
Job Stress	237.04**	.65	57.21*	284	16.00
Physiological Stress	13.14	.82	.23	283	5.79
Interpersonal Stress	3.52	63.20**	11.04	282	7.17
Personal Stress	197.66**	8.41	8.60	281	11.02

* Significant at .05 level

** Significant at .01 level

As noted in Table 4, significant univariate differences were found for the coping techniques. For the three measures of, Very Healthy, Healthy, and Unhealthy coping, significant differences were found between the marital groups.

Table 4

Mean Squares for the Measures of Coping Techniques for Female Flight Attendants

Measure of Coping:	Residence (df=1)	Marital Status (df=1)	Seniority (df=3)	Error df	Error M.S.
Very Healthy	.98	48.56*	11.57	300	8.5
Healthy	17.20	25.45*	15.59	299	4.88
Unhealthy	17.43	29.20*	2.24	298	5.79

* Significant at .05 level

** Significant at .01 level

Table 5 shows the means of the groups where significant univariate differences were found. For the measure of Plane Stress, significant differences were found between the two marital groups as well as among the four seniority groups. For the measure of Job stress, significant differences were found between the residence groups and among the seniority groups. For the measure of Interpersonal Stress, significant differences were found only between the marital groups. For the measure of Personal Stress, significant differences were found between the residence groups. No significant differences were found among any of the groups for the measure of Physiological Stress, nor for Total Stress.

Table 5

Table of Selected Means for the Stress Variables for Female Flight Attendants

Stress Variable:	Residence		Marital Status		Seniority			
	non-commuter	commuter	non-married	married	1-5	6-10	11-15	16+
On Plane Stress	18.37	18.40	18.74*	18.16*	17.36*	18.07*	18.66*	19.25*
On Job Stress	16.28**	18.11**	16.90	17.14	16.67*	18.05*	17.71*	15.83*
On Physiological Stress	10.16	10.58	10.33	10.35	10.34	10.41	10.30	10.37
On Interpersonal Stress	10.69	10.86	11.19**	10.50**	10.32	10.86	11.09	10.64
On Personal Stress	11.52**	13.35**	12.40	12.24	12.39	13.23	12.29	11.71
Total Stress Score	67.24	71.39	69.96	68.39	67.20	70.18	70.19	68.26

* Significant at .05 level

** Significant at .01 level

As noted in Table 6, significant univariate differences were found. For the measures of Very Healthy, Healthy, and Unhealthy coping, significant differences were found between the two marital groups.

Table 6

Table of Selected Means for the Coping Variables for Female Flight Attendants

Coping Variable:	Residence		Marital Status		Seniority			
	non-commuter	commuter	non-married	married	1-5	6-10	11-15	16+
Very Healthy	18.91	18.84	19.41*	18.53*	19.21	18.64	18.99	18.47
Healthy	9.19	8.95	9.50*	8.76*	9.70	8.82	8.84	8.85
Unhealthy	7.34	6.90	7.57*	6.89*	7.04	7.49	7.09	7.18

* Significant at .05 level.

** Significant at .01 level.